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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/795,845	03/08/2004	Sivaprasath Swaminathan	60046.0072US01	1248
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Leonard J. Ho The Hope Law			NGUYEN,	TANH Q
P.O. Box 2825	1 11111		ART UNIT	PAPER NUMBER
Atlanta, GA 30301			2182	
			DATE MAILED: 11/14/2004	6

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)				
Office Action Summers		10/795,845	SWAMINATHAN, SIVAPRASATH				
•	Office Action Summary	Examiner	Art Unit				
		Tanh Q. Nguyen	2182				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL CHEVER IS LONGER, FROM THE MAILING Designs of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. Operiod for reply is specified above, the maximum statutory period are to reply within the set or extended period for reply will, by statut reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	OATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on 08 N	March 2004					
		s action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
,_	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	ion of Claims						
-	4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.						
-	4a) Of the above claim(s) is/are withdrawn from consideration.						
	5) Claim(s) is/are allowed.						
	⊠ Claim(s) <u>1-20</u> is/are rejected.						
	Claim(s) is/are objected to.						
·	Claim(s) are subject to restriction and/or election requirement.						
	ion Papers	,					
_							
9) The specification is objected to by the Examiner.							
10)⊠ The drawing(s) filed on <u>08 March 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
'''	The dath of declaration is objected to by the E.	xammer. Note the attached Office	Action or form P1O-152.				
Priority u	under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ul>							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment	t(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date							
	B) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application  6) Other:						
Paper No(s)/Mail Date 6) Uther:							

#### **DETAILED ACTION**

#### Specification

1. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms, which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are:

106 (page 5, line 21) refers to both a server computer and a serial port connection

204 (page 6, line 2) refers to the terminal emulation program, but FIG. 2 indicates 204 to be a system memory

102 (page.8, line 13) refers to both the server computer and the client computer.

# Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 9-10, 19-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 9, 19 recite a "computer-readable medium", and the specification discloses "the computer-readable medium" including propagated signal on a carrier (page 4, lines 1-7) and communication medium (page 9, lines 6-15). A signal on a carrier and communication medium are not considered statutory subject matter under

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the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" posted on the USPTO website on October 26, 2005, and also published in the Official Gazette on November 22, 2005.

Claim 10 recites "A computer-controlled apparatus capable of performing the method of claim 1". Claim 20 recites "A computer-controlled apparatus capable of performing the method of claim 11".

Claims 10, 20 are apparatus claims, yet do not recite any element for the apparatus, and therefore cannot be considered as a machine under 35 U.S.C. 101.

# Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
- 6. Claims 10, 20 are rejected under 35 U.S.C. 112, first paragraph, as being to undue breadth.

Claim 10 recites "A computer-controlled apparatus capable of performing the method of claim 1". Claim 20 recites "A computer-controlled apparatus capable of performing the method of claim 11".

The claims are subject to an undue breadth because the claims cover every conceivable computer-controlled apparatus for achieving the stated purpose while the

specification discloses at most only those computer-controlled apparatus known to the inventor.

7. Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1 recites "determining whether a device is connected to the communications port that is incompatible with console redirection" in lines 6-7, which suggests that the communications port is incompatible with console redirection.

There is no support in the "Detailed Description of the Preferred Embodiment" of specification for the communications port to be incompatible with console direction. "The "Detailed Description of the Preferred Embodiment" appears to suggest "determining whether a device connected to the communications port is incompatible with console redirection".

Note that any amendment to claim 1 may necessitate amendment of the "Summary of the Invention".

8. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "determining whether a device is connected to the communications port that is incompatible with console redirection" in lines 6-7, which

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suggests that the communications port is incompatible with console redirection. The recitation appears to be in conflict with "determining that an incompatible device is connected to the communications port" recited in lines 8-9.

Note that any amendment to claim 1 may necessitate amendment of claim 3 which also recites "determining whether a device is connected to the communications port that is incompatible with console redirection" in lines 1-2, and in lines 8-9.

9. The rejections that follow are based on the examiner's best interpretation of the claims.

### Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 1-2, 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flanagin (US 6,560,660) in view of Graf (US 6,317,798).
- 12. <u>As per claim 1</u>, Flanagin teaches a method for disabling a first requesting application program capabilities [53, FIG. 1] in the presence of an incompatible device, the method comprising:

determining whether a communications port has been enabled for utilization with a first requesting application program feature (the operating system accepts requests

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for use of serial port 38 and grants exclusive use to a first requesting application program [col. 3, lines 26-32], hence the serial port being determined to be enabled for utilization with the first requesting application program);

in response to determining that the communications port has been enabled for exclusive use by the first requesting application program, determining whether a device connected to the communications port is incompatible with the first requesting application program [col. 4, lines 1-8]; and

in response to determining that an incompatible device is connected to the communications port, disabling the first requesting application program feature [col. 4, lines 9-12; col. 5, lines 33-36; col. 5, lines 38-44].

Flanagin further teaches the first requesting application program being a remote device service program [col. 3, lines 37-40], but does not specifically teach the first requesting application program being a BIOS-provided console redirection application program.

Graf teaches BIOS-provided console redirection allowing I/O operation within a remote server to be redirected to a management console of another server in a different location, and further allowing for troubleshooting boot problems from the remote location [col. 1, lines 47-57]

Since a BIOS-provided console redirection application program is no more than a specific remote device service application program, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate BIOS-provided console redirection, as is taught by Graf, as the remote device service of

Flanagin in order to manage I/O operations of the server from a remote location and to troubleshoot boot problems from the remote location.

- 13. As per claim 2, Graf teaches using a BIOS setup utility to enable console redirection [col. 1, lines 56-57]. Since it was known in the art at the time the invention was made to use a BIOS utility setup utility to specify configuration data for the enablement of a given feature, store the specified configuration data in a nonvolatile memory, and read the configuration data from the nonvolatile memory to determine whether the given feature is enabled, it would have been obvious to one of ordinary skill in the art at the time the invention was made to store configuration data for the enablement of the console redirection in a nonvolatile memory and to read the configuration data stored in the nonvolatile memory in order to determine whether console redirection is enabled.
- 14. As per claim 3, Flanagin teaches the communications port being enabled for communication, transmitting data on the communications port, and determining whether the device connected to the communications port is incompatible with the first requesting application program [100-106, FIG. 3]. Graf teaches the first requesting application program being a console redirection application program (see rejection above), and console redirection involving a UART of the server [col. 5, lines 56-59].

Flanagin/Graf does not teach determining that a non-UART device is connected to the communications port in response to determining that a receive buffer of the communications port contains data.

Since it was known in the art at the time the invention was made for a non-UART

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device (such as a mouse) connected to a communications port to respond to the toggling of the DTR line in a register (at address 3FC/2FC on standard IBM-compatible computers) by sending data to the UART of the server, and to read a line status register (at address 3FD/2FD on standard IBM-compatible computers) to determine that the receive buffer of the communications port contains data, it would have been obvious to one of ordinary skill in the art at the time the invention was made to read the line status register to determine that the receive buffer of the communications port contains data, hence determining that the device connected to the communications port is a non-UART device (i.e. the mouse).

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- 15. As per claim 4, since it was known in the art at the time the invention was made to store an application program in a compressed format and not uncompressing the application program until the application program is needed due to memory constraints, it would have been obvious to one of ordinary skill in the art at the time the invention was made to not uncompress the application program (i.e. the console redirection feature of Flanagin/Graf) until the application is needed in order to meet memory constraints.
- 16. As per claim 5, Flanagin teaches enabling the first requesting application program in response to a compatible device being connected to the communications port [108, FIG. 3].
- 17. As per claim 6, it would have been obvious to one of ordinary skill in the art at the time the invention was made to uncompress the compressed application program (i.e. the console redirection feature of Flanagin/Graf) in order to execute the application

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program (see the rejection of claim 4 above).

- 18. <u>As per claims 7-8</u>, Flanagin/Graf teaches the incompatible device comprising a modem (see the rejection of claim 3 above); Flanagin teaches a BIOS power-on self test procedure [col. 1, lines 34-36].
- 19. <u>As per claims 9-10</u>, the claims generally correspond to claim 1 above, and are rejected on the same basis.
- 20. As per claim 11, see the rejection of claims 1, 3 above.
- 21. As per claims 12-20, see the rejections of claims 2-10 above.

#### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanh Q. Nguyen whose telephone number is 571-272-4154. The examiner can normally be reached on M-F 9:30AM-7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TANH Q NGUYEN
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100

TQN November 12, 2006